Schedule and Tasks

C.J. Gardner

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1. 29 August–1 September 2006 (Tuesday–Friday): Tandem work with protons and chlorine (Cl^{14+}). Transport to TTB beamstop.
2. 5 September 2006 (Tuesday): Finish RS Check-Off List items. Transport proton beam from Tandem to Booster.
3. 6 September (Wednesday): Inject and accelerate protons to 1 GeV (kinetic energy) in Booster. Do EBIS-Booster penetration fault study. Document setup.
4. 7 September (Thursday): Transport Cl^{14+} from Tandem to Booster. Inject and accelerate to 650 MeV per nucleon. Setup extraction and transport to NSRL target room. Document setup.
5. 8 September (Friday): Accelerate Cl^{14+} to 1000 MeV per nucleon. Setup extraction and transport to NSRL targret room. Document setup.
6. 11 September (Monday): Start of Nsrl06c run.
7. During NSRL running, setup Booster User 1 to test magnetic cycle for acceleration of Au^{31+} to same velocity as Au^{32+}.
8. 20 October (Friday): End of Nsrl run.
9. 23 October (Monday): Begin working with gold beam (Au^{32+}) in Booster.
10. Inject and accelerate Au^{32+} to nominal extraction energy. Can Au^{32+} be accelerated to rigidity required for extraction of Au^{31+} at same velocity as Au^{32+}?

11. 25 October (Wednesday): AGS RS Check-Off List completed; AGS ready to accept beam.

12. Extract beam from Booster and transport to AGS. Inject one Booster load (6 bunches) of Au^{32+} into AGS. Measure revolution frequency. Allow beam to debunch; then rebunch at harmonic $h = 12$. Work on acceleration.

13. Commission modified vertical tune quad string in AGS.

14. Setup Booster-AGS synchro with bunch-to-bucket capture at $h = 24$ on AGS injection porch.

15. BTA foil studies. We need to be able to turn on F6 Septum magnet and BTA dipoles DH2 and DH3. This allows observation of beam on BTA beam profile monitors MW006 and MW060 and determination of stripping efficiencies. Injection onto AGS injection porch allows for determination of energy loss and energy spread due to stripping.

16. Setup 4 transfers of gold to AGS per AGS cycle. Setup cogging. Commission Blaskiewicz's scheme for merging 24 bunches to 8 and then to 4 bunches on the AGS injection porch. (This will require about a week of effort according to Tom Hayes.)

17. Accelerate 4 bunches to top energy at harmonic $h = 12$. Setup AGS transition jump.

18. Investigate Booster extraction of Au^{32+} at lower than nominal velocity. How rapidly does stripping (to Au^{77+}) efficiency fall off?

19. Transport Au^{31+} from Tandem to Booster. Inject and accelerate to same velocity as Au^{32+}. Transport to AGS and inject. Compare with Au^{32+} setup. Which is better?

20. 1 November (Wednesday): Start of RHIC cooldown.

21. Complete radiation safety check-off items to allow extraction from AGS into U-line. Setup AGS extraction and U-line transport. Setup W-line transport to dump. Setup AGS-RHIC synchro. Setup transport in X and Y arcs.

22. 8 November (Wednesday): Beam in RHIC.